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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/575,693	04/13/2006	James Edward Cooper	02157.0028U1	3562
23859 7590 03/19/2008 NEEDLE & ROSENBERG, P.C. SUITE 1000 999 PEACHTREE STREET ATLANTA, GA 30309-3915				
EXAMINER NGUYEN, HOANG M				
ART UNIT 3748		PAPER NUMBER		
MAIL DATE 03/19/2008		DELIVERY MODE PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/575,693

Applicant(s)

COOPER ET AL.

Examiner

Hoang M. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 and 18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 and 18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-8508)
Paper No(s)/Mail Date 2/4/08
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Applicant's amendment dated February 04, 2008, has been fully considered.

Applicant amended claims 14-15 to overcome the 101 rejections, said rejection has been withdrawn. However, a new ground of 101 rejections has been made to reject claims 1, 16, 18.

Applicant argued the 103 rejection is not valid because Stotts does not disclose the comparison step. The Examiner agrees and withdraws the 103 rejection. However, a new ground of rejection has been made based on Applicant's newly submitted reference, JP 1194900 (Sanada).

Claims 1, 16, 18, are rejected under 35 U.S.C. 101 because:

Claim 1 has no tangible results; it is just a copulation of steps with no tangible result and is rejected under 35 USC 101.

Claims 16, 18 are non-statutory; they do not pass the infringement test. I have pasted in that section of the MPEP, claims 16, 18 cannot pass this test. Note Ex parte Porter, 25 USPQ2d 1144 (Bd. Pat. App. & Inter. 1992) for situations where a method claim is considered to be properly dependent upon a parent apparatus claim and should not be objected to or rejected under 35 U.S.C. 112, fourth paragraph. See also MPEP § 608.01(n), "Infringement Test" for dependent claims. The test for a proper dependent claim is whether the dependent claim includes every limitation of the parent claim. The test is not whether the claims differ in scope. **A proper dependent**

claim shall not conceivably be infringed by anything which would not also

infringe the basic claim. These dependent claims would be infringed by any program recorded to a recordable media.

Claims 3-4 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claims 3-4 are using improper language. The proper language should be "The method of operating the engine of claim 2, wherein the engine is a Stirling engine", and "The method of operating an engine in claim 3, wherein the Stirling engine is a domestic heat and power unit".

Claims 14-16, 18, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It's unclear if the phrase "a processor" in claims 16, 18, refers to the same elements as "a processor" in claims 14-15.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by JP 1194900 (Sanada).

Sanada discloses a power plant using diesel engine 11E, 21E, comprising a processor having power-factor measuring sections 16, 26, 17, 27, and the input of the controlling section 40 for inputting power-factor, comparing the signals, then generating control signals (note abstract).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-16, 18, are rejected under 35 U.S.C. § 103(a) as being unpatentable over JP 1194900 (Sanada) in view of U.S. 3660583 (Takanasi et al) and US 4891569 (Light). Sanada discloses all the claimed subject matter as set forth above in the rejection of claim 1, but does not disclose an alarm when the actual power factor is lower than a predetermined value. Light is relied upon to disclose in figure 2 it's well known to set an alarm when the power factor is out of range. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to provide an alarm in Sanada as taught by Light for the purpose of preventing engine break down by the alarm. Regarding claims 5-6, 11, it would have been obvious to use electrical grid, engine at start-up, and different type of alarms in Stotts for the purpose of

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improving the efficiency of the system. Regarding claims 3-4, it would have been obvious to utilize the control system of Sanada in a Stirling engine for the purpose of controlling said Stirling engine and because both Stirling engine and diesel engine are gas engines with equivalent functions.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Nguyen whose telephone number is (571) 272-4861. The examiner can normally be reached on Tuesday--Friday from 12:30 AM to 10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Hoang M Nguyen/
Primary Examiner, Art Unit 3748

HOANG NGUYEN
PRIMARY EXAMINER
ART UNIT 3748

Hoang Minh Nguyen
3/19/2008